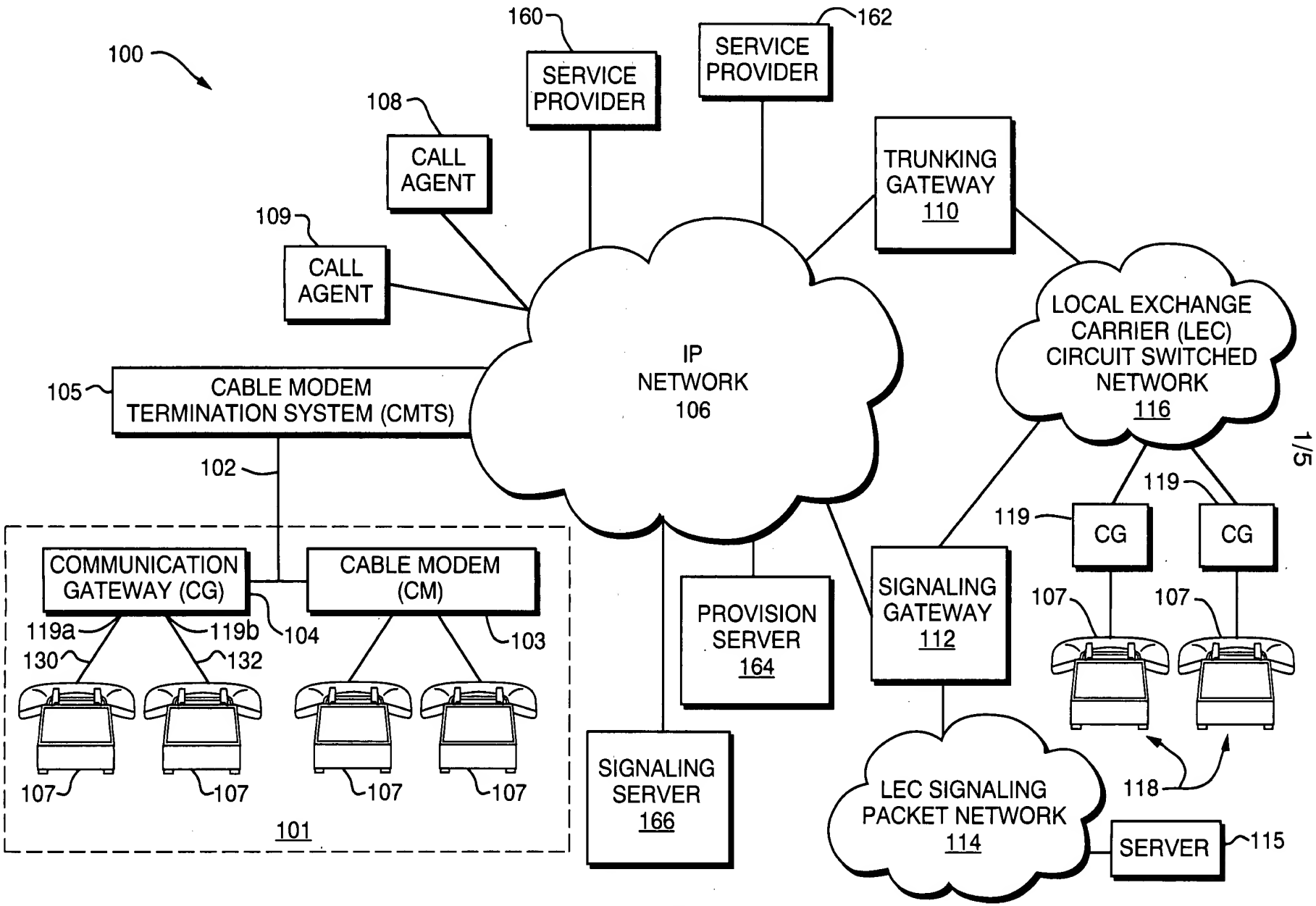
100
160
SERVICE PROVIDER
162
SERVICE PROVIDER
108
CALL AGENT
109
CALL AGENT
TRUNKING GATEWAY 110
IP NETWORK 106
LOCAL EXCHANGE CARRIER (LEC) CIRCUIT SWITCHED NETWORK 116
105
CABLE MODEM TERMINATION SYSTEM (CMTS)
102
119
119
CG
CG
COMMUNICATION GATEWAY (CG)
CABLE MODEM (CM)
119a
119b
104
103
130
132
107
107
107
107
107
107
PROVISION SERVER 164
SIGNALING GATEWAY 112
SIGNALING SERVER 166
LEC SIGNALING PACKET NETWORK 114
118
SERVER
115
101

FIG. 1

PCT/US2005/036860

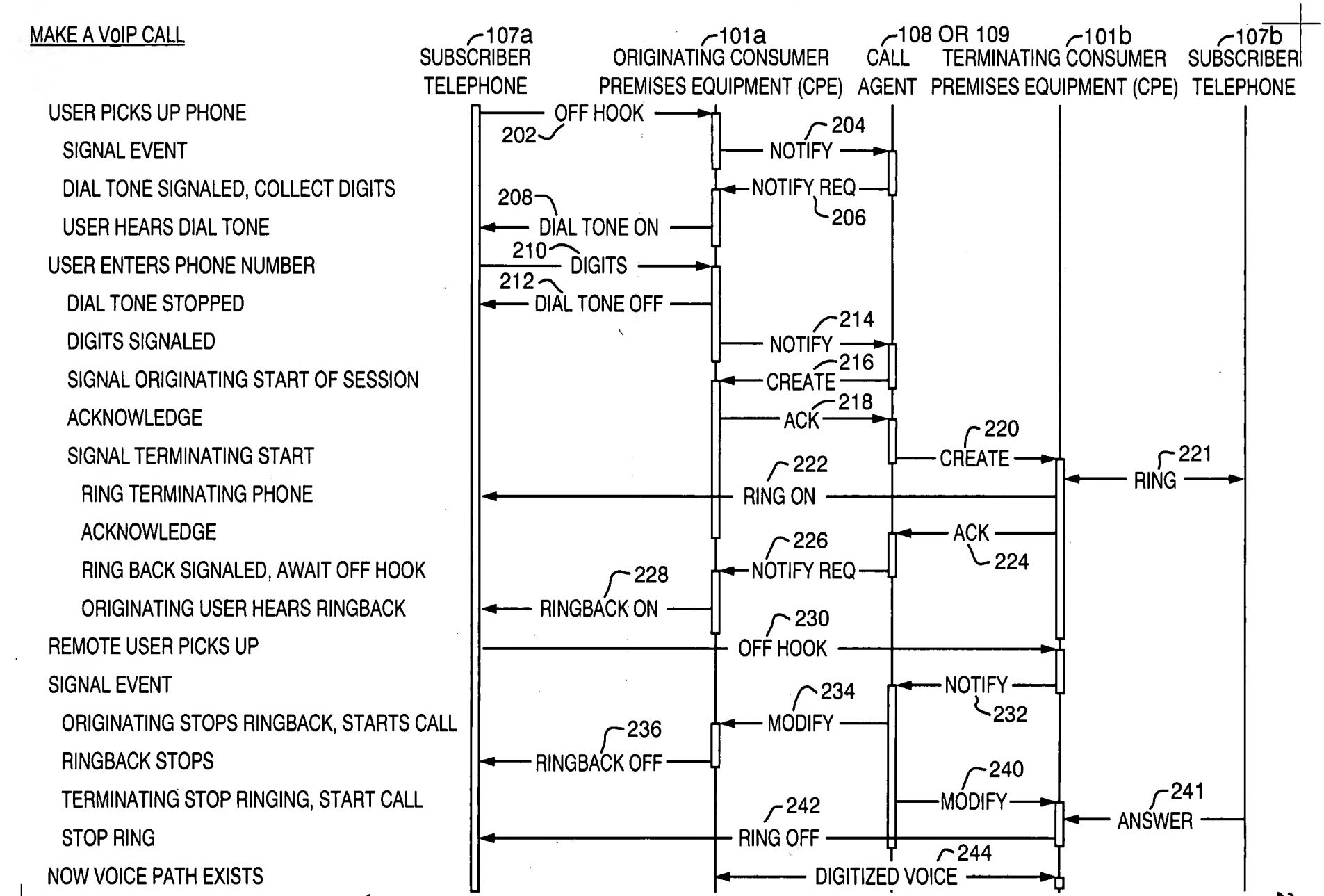

FIG. 2

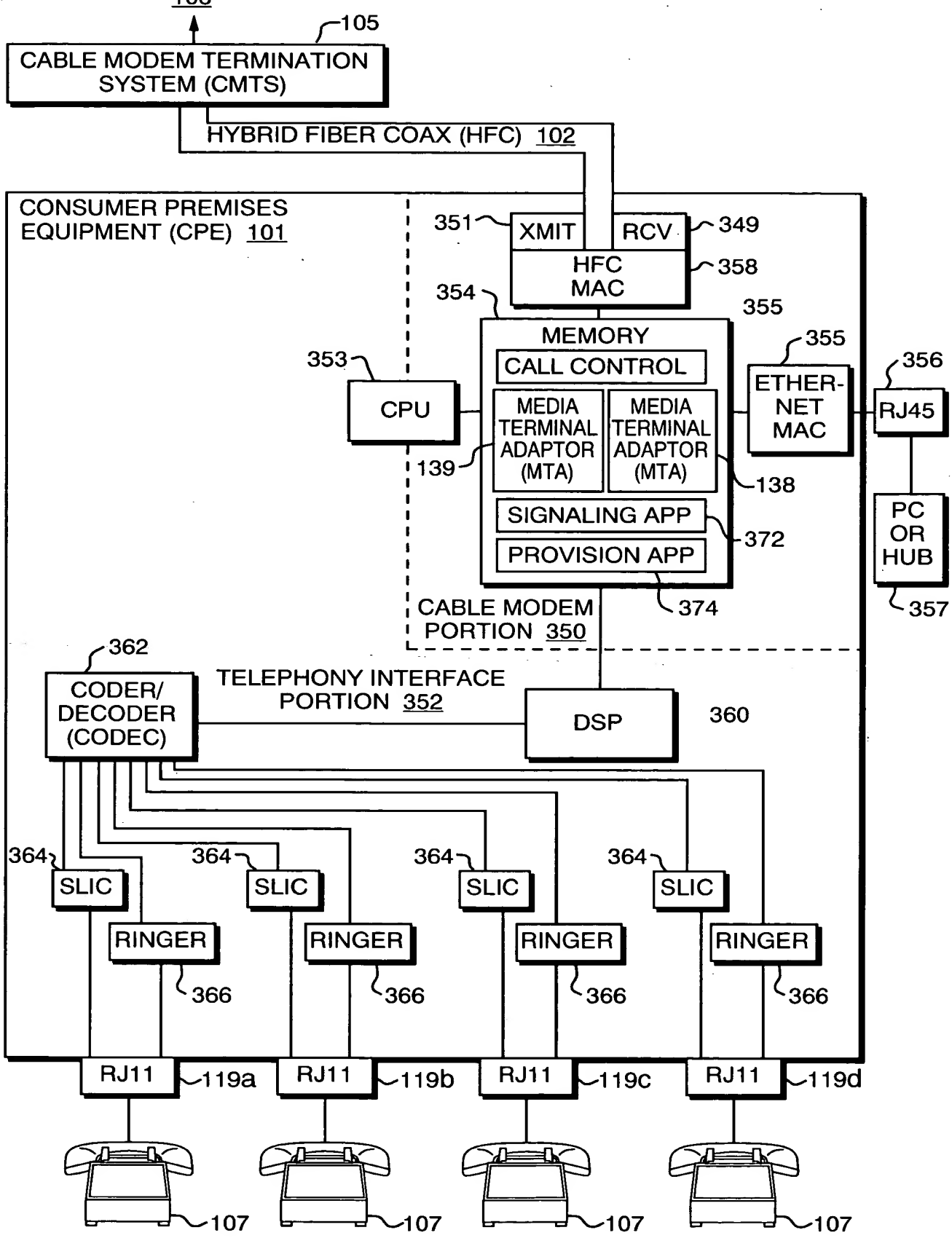
TO IP NETWORK
106
105
CABLE MODEM TERMINATION SYSTEM (CMTS)
HYBRID FIBER COAX (HFC) 102
CONSUMER PREMISES EQUIPMENT (CPE) 101
351
XMIT
RCV
349
HFC MAC
358
354
355
MEMORY
CALL CONTROL
355
353
CPU
MEDIA TERMINAL ADAPTOR (MTA)
MEDIA TERMINAL ADAPTOR (MTA)
ETHER-NET MAC
356
RJ45
139
138
SIGNALING APP
372
PROVISION APP
374
PC OR HUB
357
CABLE MODEM PORTION 350
362
CODER/ DECODER (CODEC)
TELEPHONY INTERFACE PORTION 352
DSP
360
364
SLIC
RINGER
366
RJ11
119a
119b
119c
119d
107

FIG. 3

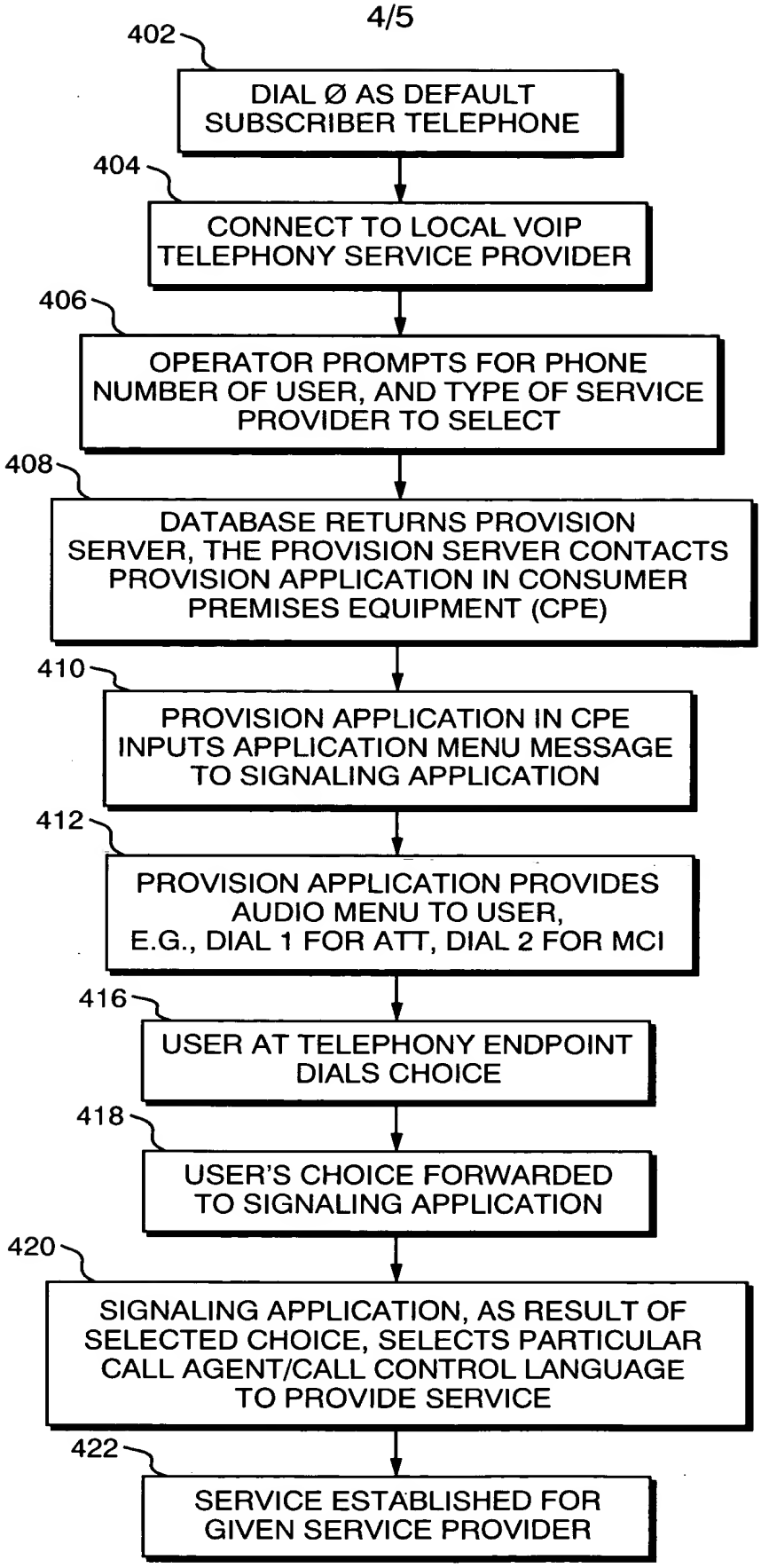
402
DIAL Ø AS DEFAULT SUBSCRIBER TELEPHONE
404
CONNECT TO LOCAL VOIP TELEPHONY SERVICE PROVIDER
406
OPERATOR PROMPTS FOR PHONE NUMBER OF USER, AND TYPE OF SERVICE PROVIDER TO SELECT
408
DATABASE RETURNS PROVISION SERVER, THE PROVISION SERVER CONTACTS PROVISION APPLICATION IN CONSUMER PREMISES EQUIPMENT (CPE)
410
PROVISION APPLICATION IN CPE INPUTS APPLICATION MENU MESSAGE TO SIGNALING APPLICATION
412
PROVISION APPLICATION PROVIDES AUDIO MENU TO USER, E.G., DIAL 1 FOR ATT, DIAL 2 FOR MCI
416
USER AT TELEPHONY ENDPOINT DIALS CHOICE
418
USER'S CHOICE FORWARDED TO SIGNALING APPLICATION
420
SIGNALING APPLICATION, AS RESULT OF SELECTED CHOICE, SELECTS PARTICULAR CALL AGENT/CALL CONTROL LANGUAGE TO PROVIDE SERVICE
422
SERVICE ESTABLISHED FOR GIVEN SERVICE PROVIDER

FIG. 4

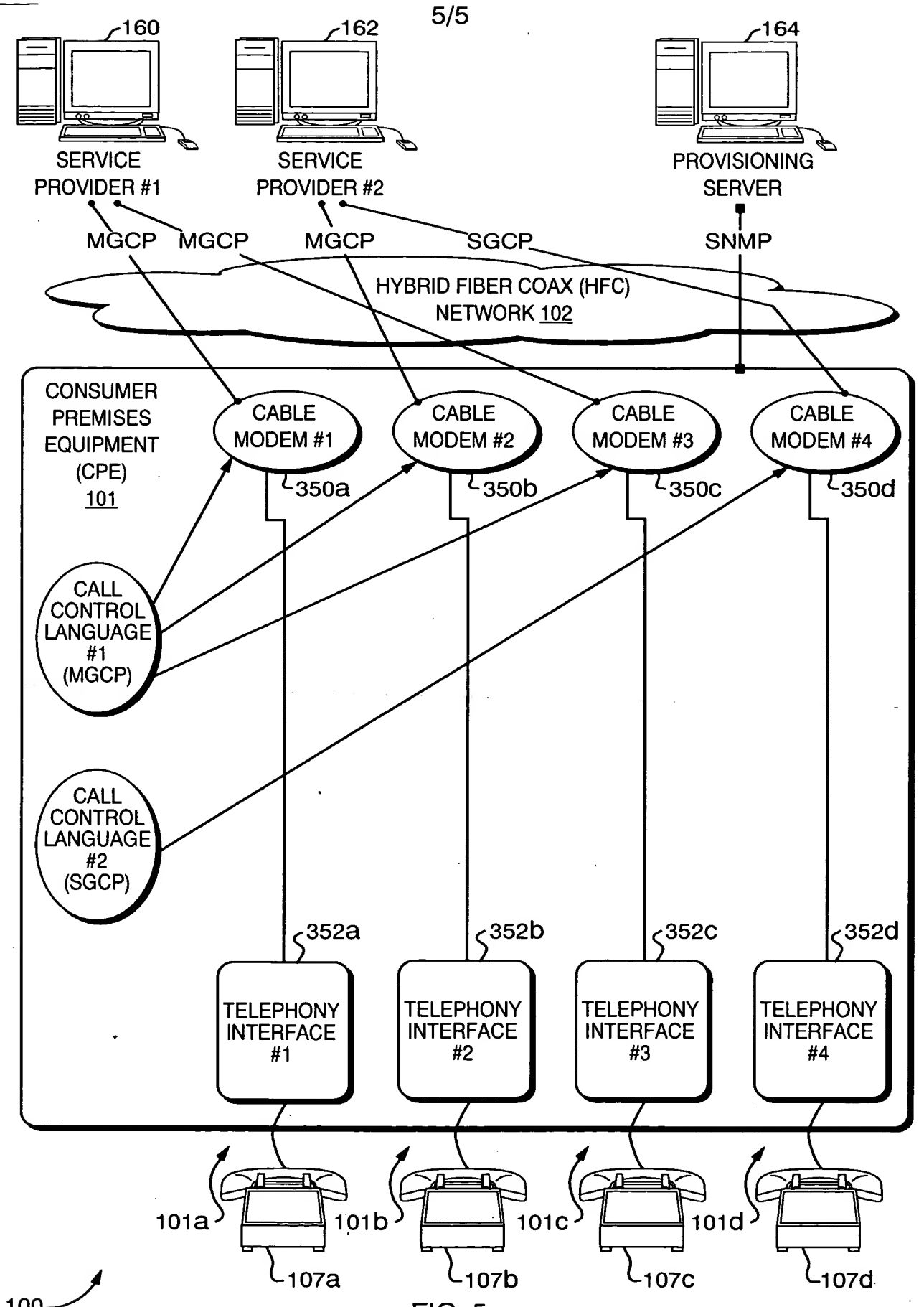
160
162
164
SERVICE PROVIDER #1
SERVICE PROVIDER #2
PROVISIONING SERVER
MGCP
MGCP
MGCP
SGCP
SNMP
HYBRID FIBER COAX (HFC) NETWORK 102
CONSUMER PREMISES EQUIPMENT (CPE) 101
CABLE MODEM #1
CABLE MODEM #2
CABLE MODEM #3
CABLE MODEM #4
350a
350b
350c
350d
CALL CONTROL LANGUAGE #1 (MGCP)
CALL CONTROL LANGUAGE #2 (SGCP)
352a
352b
352c
352d
TELEPHONY INTERFACE #1
TELEPHONY INTERFACE #2
TELEPHONY INTERFACE #3
TELEPHONY INTERFACE #4
101a
101b
101c
101d
107a
107b
107c
107d
100

FIG. 5